# Fertility in second unions in Austria: Findings from the Austrian FFS

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## Abstract

The simultaneity of decreasing fertility and changing family structures in many European countries has led to a growing interest in fertility behaviour in its relation to different family structures. The growing prevalence of higher-order unions (and the consequences for parity progression arising therefrom) is one example of an ongoing change in fertility behaviour. Childbearing is not restricted to a single union but may extend over several partnerships. Fertility behaviour in higher-order unions is becoming more and more important for determining completed fertility. Motivated by the work of [Vikat et al. 1999], we investigate fertility behaviour in second unions in Austria, focusing on whether and how it is influenced by the number of pre-union children of either partner.

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# 1. Introduction

Changing family structures together with greater instability of marriages in most industrialised countries require that we revise our traditional concept of families and, in particular, the concept of stepfamilies. Pre-marital childbearing and cohabitational unions are no longer the exception to families in the traditional sense. Childbearing is not restricted to a single-marriage union. In fact, it is not even restricted to a marital union at all. This is of great importance in relation to the concept of completed fertility over one's life course, since divorce and re-marriage typically occur during the main reproductive years. To take into account these changes in traditional family structures the term stepfamily, formerly restricted to marriages only, has been extended to include cohabitational unions involving a child of only one partner (cf. e.g. [Bumpass et al. 1995]). This extended definition of stepfamilies takes into account the fact that divorced or separated partnerships are often followed by a cohabitational union and not necessarily by a second or higher-order marriage.

Demographic developments in Austria during the past few decades provide evidence that an increasing number of men, women, and children experience the formation of a stepfamily.

Illegitimate (non-marital) fertility has become very pronounced in Austria. In 1998, 30 per cent of all children were born out of wedlock, as compared to 18 per cent in 1980 and 13 per cent in 1970 [Austrian Central Statistical Office 2000]. At the same time, the total divorce rate increased from 18 per cent in 1970 to 26 per cent in 1980 and reached a level of 39 per cent in 1998. This indicates that 39 per cent of all current marriages will sooner or later end in divorce if the duration-specific divorce rate observed in 1998 remains the same in the future. Among divorced couples in 1998, 34 per cent had no children, 30 per cent one child, 27 per cent two children, and nine per cent three or more children. About 63 per cent of the children were below the age of 14. Moreover, a cross-tabulation of marriages in Austria by the family status of each partner at the time of marriage in 1998 (Table 1.a) shows that in three out of ten marriages, at least one of the partners was divorced or widowed. This latter figure had risen from 20 per cent in 1961. Summing up, these trends provide clear evidence for the potential for stepfamilies in Austria (see also [Note1] and [Buber and Prskawetz 1999]).

A large number of studies in the European literature focus on the stability of stepfamilies and the consequences for the life course of children. Alternatively, one can take the stepfamily as one possible environment in which to investigate demographic events such as childbearing. This is of particular interest since childbearing behaviour in stepfamilies relates to childbearing of higher-order parity (at least for one partner), and it will depend in particular on whose parity progression ratio one considers (the female's or the male's). The question then arises "whether first children in new unions arrive at the same rate as first children in first unions, or at the relevant rate of children that are of higher order in a lifetime perspective, or at some other rate" [Vikat et al. 1999]. When studying stepfamily fertility, the focus has to be shifted from the

couple's relationship to the broader family, which includes children already present at the time of union formation (see [Wineberg 1990]).

Our analysis contributes to the growing literature on stepfamily fertility, which up to now has been based mainly on American data (see the extensive literature review in [Vikat et al. 1999]). European studies are restricted mainly to four countries: Sweden [Vikat et al. 1999], Czechoslovakia [Kucera 1984], Germany [Heekerens 1986], and France [Toulemon 1997]. In line with these studies, we investigate the determinants of childbearing in stepfamilies by focusing on the effect of pre-union children on fertility in second unions (and more specifically, on the conception of the first shared child) [Note 2]. We disentangle the effects of pre-union children by their number, their place of residence (in the household vs. out of household) at the time of the formation of the second union, by distinguishing between a woman's and a man's pre-union children, and by the age of the youngest child at the time of the formation of the second union. Additionally, we also control for the history of the previous union, characteristics of each partner at the time of the formation of the second union, changes in characteristics of the second union as recorded each month during the observation since union formation, calendar time period, and time elapsed since the formation of the second union.

Since we focus on the conception of the couple's first shared child in a second union, we try to control for the characteristics of both partners. While information on the respondent's characteristics is generally rather complete in most surveys on union and birth histories, corresponding information for the respondent's partner is usually missing or incomplete. Though the Austrian Family and Fertility Survey, on which we base our analysis, is of exceptionally high quality in terms of information on the partner's union and birth histories, we nevertheless have to restrict part of our analysis to male or female respondents only.

As outlined in [Bulatao 1981], several studies have shown that the effect of a couple's characteristics on childbearing may vary with parity. Hence, if pre-union children are present, the effect of these common characteristics on the first shared child is complicated by the fact that this child might be of higher-order parity for at least one partner. To control for such parity-specific effects we shall test for interactions between variables related to the number of pre-union children and variables referring to the couple's characteristics.

While the findings about the influence of pre-union children on fertility in subsequent higher-order unions are uniform across the different studies in the literature (negative with increasing number of pre-union children), the results are more diverse concerning more detailed characteristics of pre-union children, such as their place of residence (in the household vs. out of household) and whether they are the woman's or the man's pre-union children. Since these differing results might well depend on the availability and quality of the data, the comparatively high quality of information on the partner's birth and union histories in Austria allows us to gain more insight into these important factors.

We structure our analysis by testing various hypotheses about the effects of pre-union children on the intensity of the conception of a first shared child in higher-order unions. More specifically, we refer to the relative importance a first shared child might have for unions where pre-union children are present as opposed to unions where no pre-union children are present (see [Griffith et al. 1985] and [Vikat et al. 1999]). As outlined in [Bulatao and Arnold 1977] (p. 141) "the values or satisfactions individuals expect to attain through having children" in general and through having children with the current partner, "as well as the disvalues or costs they expect to incur", influence the fertility pattern and fertility preferences. As "children of different parities may serve different functions for their parents and entail different material and non-material costs as well" ([Bulatao 1981], p. 23ff), the value of a first shared child in stepfamilies will depend on the number of pre-union children.

As outlined in the literature, a child might confer a *union commitment* and a *parenthood* effect. Since the birth of a first shared child "reflects the couple's commitment to each other" ([Vikat et al. 1999], p.213), the rate at which a first child arrives in a second union should be independent of the number of children born to either partner before the second union. The parenthood effect is more closely connected to the fertility history of each partner separately, i.e., to the importance of childbearing for the individual's status as opposed to the status of the marital union (see [Griffith et al. 1985], p.74). It should be present for those partners for which the first shared birth in a second union is also their first birth ever. For them the risk of a first birth in a second union should be independent of the number of pre-union children of their partner. If it is the case that stepchildren can be a substitute for biological children, then the parenthood effect may not be observed when pre-union children are present. The extent to which a stepchild is a substitute for one's own child certainly depends on emotional and personal relationships between the stepparent and the stepchild (see [Bulatao and Arnold 1977]).

Besides the union-commitment and parenthood effect, a first shared child in stepfamilies may also confer a *sibling effect*. To the extent that pre-union children will act as half-siblings for children in new unions and substitute for biological children, we can argue as follows. The strong two child norm that is present in Austria [Note 3] may imply that stepfamilies with only one pre-union child may exhibit a higher intensity to conceive a first shared child as opposed to stepfamilies with two or more pre-union children.

Whether pre-union children will act as half-siblings depends among other things on the age of the youngest pre-union child. Since the length of intervals between successive births may be prolonged if births occur in various unions (see [Griffith et al. 1985]), we might generally observe lower fertility in stepfamilies as a consequence. We expect couples, and more specifically mothers, of young pre-union children at the time of union formation to have higher intensities of conception of a first shared child in the new union. The underlying assumption is that long extensions of childbearing periods are avoided as mothers do not wish to re-enter the

childbearing phase later for economic or career reasons. Hence, life course experiences may put some restrictions on continued childbearing in higher-order unions. As further noted in [Griffith et al. 1985] the age of the youngest pre-union child may have different effects, depending on the number of pre-union children.

The age of the youngest pre-union child may also influence the parenthood effect and thereby have the opposite effect of the sibling effect. The younger the pre-union child at the time of the formation of the new union, the more likely it might be accepted by the step-parent and possibly substitute for a shared biological child. We would therefore expect increasing intensities of the conception of a first shared child, the older the youngest pre-union child is at the time of union formation.

Summing up, our interest in this paper is to identify how the value of a first shared child changes in the presence of pre-union children of at least one partner. In particular, we test for the following values that a first shared child in higher-order unions may confer: the union-commitment effect, the parenthood effect, and the sibling effect. We test for these effects controlling for the number of pre-union children and the age of the youngest pre-union child. Since one or both partners may have already experienced childbearing, the change in the value of the first shared child may not be due only to the fact that (a) it is already a higher-order child for at least one partner, but also to the fact that (b) the values themselves have changed through the experience of earlier childbearing.

## 2. Data and method of analysis

Our study is based on the Austrian Fertility and Family Survey (FFS) which contains information on individuals concerning partnerships, fertility, employment, education, and habitation [Doblhammer et al. 1997]. The retrospective histories of partnerships and fertility for each respondent allow us to determine the timing of all births in the current and any previous union [Note 4]. Additionally, each respondent was asked whether the partner already had children at the time of union formation and if this was the case, the respondent was asked for the number and residence (living in the current household or not) of the partner's children at this time. Similarly, we can determine whether or not the respondent's children live in the current household or not, since for each child of the respondent we know if and when the child has left the household.

Since we wish to analyse the influence of pre-union children on a couple's shared fertility, we restrict our analysis to the second union [Note 5]. In second unions there are more pre-union children than in first unions; 59.6 per cent of all second unions but only 17.5 per cent of all first unions in the Austrian FFS data set record the existence of one or more pre-union children of at least one partner [Table 1.b]. Furthermore, 81.5 per cent of all higher-order unions in the Austrian FFS data set are of order two [Note 6]. Only 14.5 per cent are of order three and 4 per cent are of an order greater than three.

Among all second unions, the majority recorded at least one pre-union child. In 43.8 per cent of the cases one partner had at least one child while the other partner was still childless, and in 15.8 per cent of second unions both partners had pre-union children. In 38.8 per cent of second unions neither partner had a child [Table 1.b]. Among all third unions the situation is comparable to second unions. These numbers show that in a considerable percentage of higher-order unions at least one partner had one or more pre-union children.

Within the second union, which can, of course, be the current union at the time of the interview, we study the intensity of the conception of a first shared child [Note 7]. By choosing conception instead of birth as the event under consideration we take care of any reverse causality between the event and various covariates, e.g. marriage. If we had taken birth as the event, we would not have been able to verify the causal relationship between marriage and fertility, for instance [Note 8]. Moreover, this set-up of our data allows us to include children conceived within the union but born after the end of the union.

Table 2 summarises the number of eligible respondents included in the analysis and the number of censored cases by cause. Of 6,120 respondents, 824 indicated a second-order union. We restricted the analysis to native Austrians, to respondents who had not experienced a death or adoption of a child before the second union, and to records with no missing answers with respect to (a) information regarding the respondent's and (b) the partner's pre-union children, as well as

(c) the beginning and end of the second union. As was done in [Griffith et al. 1985], those records where the woman was 40 years or older at the start of the second union [Note 9] were excluded.

Comparing the birthdate of a child with the union biographies allows us to assign a child to a given union if it was born within that union. But what about a child born *after* the end of the first union and *before* the formation of the second union or a child born after the interview date? It is questionable whether a child born shortly before two partners moved in together should be defined as their shared biological child, since the data include no further information. To focus on the determinants of childbearing within the second union, we exclude records where a child was born 11 months prior to union formation [Note 10]. On the other hand, we keep those records where the woman was pregnant with the first child of the second union at the time of the interview. For those records where the woman was pregnant at the time of the interview, the event (i.e. the conception of the first child) is set as the expected date of birth – which is coded in our data set – minus nine months.

In the Austrian FFS data set the beginning of a union is coded as the date when the couple moved into a joint household. We start the observation nine months before the time of the formation of the second union, assuming that the couple is already exposed to the risk of the conception of a shared child before they set up a household together. This assumption allows us to include all births that occurred in the second union but were conceived prior to moving in together. The validity of this assumption is strengthened by the fact that about 68 out of a total of 339 children born in second unions were conceived before a common household was established. If the difference between the end of the first and the beginning of the second union is less than nine months, we distinguish between two cases. On the one hand, we determine the start of the observation to be the end of the first union if the latter ended in divorce. But if, on the other hand, the first union ended because the partner died, we set the starting time to be the time of formation of the second union, i.e., the date when the respondent forms a joint household with his/her second partner. Behind this latter assumption lies the fact that the death of a partner is not predictable, in contrast to an upcoming divorce. Our set-up is arranged such that that we exclude those unions where the conception of the first child of the second union falls within the first union. In the following analysis "start of the second union" is always to be understood as the time point when the respondent is assumed to be exposed to the risk of conceiving a first shared child. We set the start of the time of exposure nine months prior to union formation at the earliest, and at the date of union formation at the latest.

Altogether we are left with 695 respondents, 199 of them men and 496 of them women. Among these 695 respondents, 339 recorded at least one common child in their second union. Censoring for the remaining 356 records is performed as follows: two records are censored at the date of adoption of the first common child, four records are censored at the date of the death of a

child who was born before the union, 151 records are censored at the date of disruption of the union and 199 records are censored at the date of the interview because no child was born.

Since we do not have any clear knowledge about the time dependence of the process, we model the intensity of the conception of a first common child within the second union using a *piecewise constant exponential model* (see [Blossfeld and Rohwer 1995]):

$$h(t) = \exp(\alpha_{l(t)} + A(t)\beta)$$

Here *l(t)* is the number of the interval of constancy that contains time t, and $\alpha_k$ is a constant associated with the *k*th time interval. A(t) denotes a row vector of categorical covariates (including also time-varying covariates, which may change their value over the process time), and $\beta$ represents the associated column vector of coefficients assumed not to vary across time intervals.

We split the duration variable into eight time intervals: $1^{st}$ – $5^{th}$ month, $6^{th}$ – $9^{th}$ month, $10^{th}$ – $15^{th}$ month, $16^{th}$ – $21^{st}$ month, $22^{nd}$ – $33^{rd}$ month, $34^{th}$ – $45^{th}$ month, $46^{th}$ – $69^{th}$ month, and $70^{th}$ month and later. Keeping in mind that for 71.3 per cent of all respondents the start of observation begins nine months prior to moving in together, these intervals can, for the majority of respondents, be described as following: nine to five months before moving in together, four to one month before moving in together, "formal" start of union (i.e. the time when the couple moved into a common household), up to five months after moving in together, six to eleven months after moving in together, second year, third year, fourth to fifth year after moving in together and finally sixth year onward.

Within each of these eight time intervals transition rates are assumed to be constant, but we allow transition rates to vary across the intervals. In a first step we postulate that only the baseline transition rate – as given by the interval-specific constant transition rates $\alpha_k$ – can vary across time intervals and that each covariate has the same proportional effect in each time interval. In a second step we test for interactions between covariates and interactions between covariates and the duration parameter. The latter extension allows us to test whether the proportionality assumption of the regression model is justified for each of the covariates under investigation.

We apply the program ROCANOVA [Martinelle 1993], which implements the maximum likelihood estimation of the coefficients of the transition rate model. For a comprehensive review of event history analysis as connected to indirect and direct standardisation in demography see [Hoem 1987].

## 3. Covariates

For each of the 695 respondents in our data set we calculate the number of *pre-union children of the respondent and his or her partner*. We consider a child as belonging to the second union if it is born at union formation or later [Note 11].

In contrast to the Swedish data used in [Vikat et al. 1999], the Austrian FFS includes very detailed information on the partner's pre-union children and whether and how many pre-union children the respondent and the partner have brought into the new household, but the information on the partner's pre-union children proved to be very inconsistent.

Consider the variable *age of the youngest child* at the start of the second union. To construct this variable we first verified the matching between stepchildren in the respondent's birth biography and the number of the partner's pre-union children indicated in the partner's biography. Fifty persons reported that their partner brought at least one pre-union child into the household at the time of the formation of the second union, but only for twelve (among those 50) respondents did these children show up as stepchildren in the birth biography of the respondent him-/herself. Hence, for 38 respondents we do not have any information on the birth date of the partner's pre-union children and consequently we cannot take into consideration these children in constructing the age of the youngest child at the start of the second union [Note 12]. As a solution to this data inconsistency we include the variable age of the youngest child only in regressions where we base our calculations on female respondents only. This practice is justified by the fact that the youngest child is the child that is most likely to be brought into the new household and women are more likely than men to bring their pre-union children into their second union. The age of the youngest child varies across the duration variable, but for our analyses we code the variable as a fixed covariate by calculating the age of the youngest child *at the start of the second union.* The number of resident and non-resident pre-union children of either partner is also a fixed covariate and is only recorded at the time of the *formation of the second union.* Since we do not have any further information on changes of residence of the partner's children, we cannot re-code the variable for the point of time of the start of the second union. But one can argue that it is usually foreseeable at the start of a union if a pre-union child will join the joint household or not.

We control for the age of the youngest child since we expect women whose youngest child at the start of the second union is already of school age or older to have lower intensities of a conception of a first child in the second union. As was done in [Griffith et al. 1985], we organize the variable according to the number of children. The most common hypotheses why mothers of children who are older at the start of the second union are less likely to have another child are (a) that mothers do not want to prolong or start the period of childbearing again, and (b) the child is already too old to benefit from a half sibling. But as noted in the introduction, the age of the youngest child may have the opposite effect. The parenthood effect, which may apply for the

partner who does not have any pre-union children, may be stronger in the case of older children, since they are less likely to be considered substitute for a biological child. The distribution of occurrences and exposures across the different levels of the variable age of the youngest child is summarised in Table 2 of the Appendix.

Instead of explaining the intensity of conception of a first common child in terms of the respondent's and partner's characteristics and including the sex of the respondent as a further covariate (see [Vikat et al. 1999]), we directly distinguish between a woman's and a man's characteristics within the set of alternative covariates [Note 13]. We kept the gender in our models to be able to check whether our results differ between couples depending on whether the respondent is male or female. As we only know that it is the second-order union for the respondent, the argument would be that women who are partners of men for whom it is the second union are different from women who are themselves already in their second union. Similarly, the reverse argument holds for men, i.e., men in second unions may be different from male partners in unions that are the second unions for women.

Among the second unions considered in our study, 43.7 per cent of all female partners indicate at least one pre-union child, while only 26.8 per cent of male partners have had at least one pre-union child (Appendix, Table 1). Distinguishing between pre-union children living in the household and those not living in the household at the time of the formation of the second union emphasises our previous discussion. Female partners are more likely to bring their pre-union child(ren) into the newly formed household. 41.6 per cent of all female partners indicate that they have brought at least one of their pre-union children into the household, while the corresponding number for men is only 5.3 per cent (Appendix, Table 1). Even when we take into account that male partners indicate on average about 40 per cent fewer pre-union children than female partners, this difference is significant.

Some obvious differences between female respondents and female partners and male respondents and male partners, respectively, are clearly evident in our data set (Appendix, Table 2 and Table 3). About 54 per cent of all female respondents have pre-union children, as compared to 19 per cent of all women who are partners of male respondents. For men the difference is less pronounced. 36 per cent of all male respondents have pre-union children, while only 23 per cent of men who are partners of female respondents indicate having pre-union children.

Besides pre-union children, we have also experimented with a set of covariates that might pick up some individual characteristics (Appendix, Table 1).

For analysing the effect of the age of both partners we chose the representation *woman's age at the start of the second union* and *man's age at the start of the second union.* 77.1 per cent of female partners, but only 59.6 per cent of male partners, were below age 30 at the start of the second union (Appendix Table 1). Controlling for the age of each partner (and in particular for

the woman's age at the start of the second union) is particularly important since our results would otherwise be confounded by the argument that there is a negative age effect on fertility in second unions. Another argument for lower fertility could also be greater age-heterogamy (large age differences between the partners) in second unions.

To capture other characteristics of the first union in addition to any pre-union child, we also include the *dissolution form of the first union* and *whether the respondent has been formerly married*. Since information on the characteristics of the preceding union is only available for the respondent, we shall run gender-specific regressions in the next section once we have included these factors in our analysis [Note 14]. Before considering the distribution of occurrences and exposures across these covariates we have to explain briefly the relevant information contained in the Austrian FFS.

For each union the following dates and characteristics are recorded: union status (married vs. cohabiting) at time of union formation, date of marriage, the reason for union disruption if one had occurred (whether the respondent broke the union or his/her partner or both partners, or whether the partner died). To arrive at a compact representation for the covariate 'dissolution form of the preceding union', we have used only three alternative levels: separation (regardless of who ended the union), widowed and no answer. In our data set 91.1 (95.5) per cent of all female (male) respondents recorded a union disruption, 4.2 (1.5) per cent recorded that their first partner had died, and 4.6 (3.0) per cent gave no answer (Appendix, Tables 2 and 3). We include the dissolution type of the preceding union in our analysis since the fact whether second unions have come about because of divorce or of widowhood is likely to influence their character [Burgoyne and Clark 1981].

Our interest in the effect of the variable 'formerly married' stems from the different hypotheses proposed in the literature as regards the family status at the date of formation of a second union. [Heekerens 1986] focuses on reproductive behaviour in combination with remarriage behaviour. He offers two hypotheses: (a) The marriage order of the male partner (first-married versus re-married) influences the completed fertility. On average the number of children is lower for marriages that are already higher-order marriages for the male partner. (b) "According to the second hypothesis, the lower fertility of remarried women (by comparison with first-married women) is at least partially due to the fact that a higher percentage of these (remarried) women is married to remarried men" ([Heekerens 1986], p. 515). Both hypotheses rest on the observation that "a substantial proportion of men with divorce experience tend to bring into marriage a preference for not becoming a parent (again) during their marriage" ([Furstenberg 1980], p. 470). This lower preference for childbearing on the part of re-married (divorced) men is investigated in [Rosenstiel 1984] in greater detail. Not only is the normative pressure from society lower once you have children, but having pre-union children also implies a higher financial burden (laws require fathers to support children) and might even make a further

child not 'feasible'. And the experience of a divorce might also negatively influence the attitude towards further childbearing.

Additionally we control for *marital status* ( pre-cohabitation – cohabiting – married) and the *calendar time period*. The distinction between three levels of marital status allows us to control for the fact that the start of the second union differs across the respondents, i.e., the period of observation starts for the majority nine months before the time of the formation of the union. Only for about a fourth of all respondents does the period of observation begin less than nine months prior to union formation or at union formation. Since the variables union status and calendar time period are characteristics of the second union and common to both partners we can include these factors in regressions where we include all respondents in our selected data set. Couples in their pre-cohabitation time account for 13.9 per cent of the time of exposure to the "risk" of the conception of a first common child in our data. Cohabiting couples account for 54.3 per cent and married couples for 31.9 per cent of the total time of exposure (Appendix, Table 1). The covariate *calendar time period* is split up according to changes in maternity leave periods and economic trends and is aimed to include changes in childbearing behaviour as influenced by family policies (cf. [Hoem et al. 1999]). In fact, in our data set the calendar time period seems to take into account the increasing prevalence of second unions in more recent years. More than half (56.1 per cent) of the total exposure time is contributed by months after 1987.

## 4. Results

We structure our results by setting up models in which we combine both sexes and models which we run separately for female and male respondents.

In models where we use both sexes (Table 3) we control for covariates that are available for each partner separately (age, pre-union children) and covariates that are specific to the current union (marital status, calendar time period, duration of union). To obtain a better understanding of the effect of pre-union children on the intensity of the conception of a first common child in a second union, we investigate different representations of the variable 'pre-union children'. In our first model, we distinguish only between a woman's and a man's pre-union children (Table 3, Model 1). In a second step (Table 3, Model 2) we include information on the residence of pre-union children of each partner at the time of the formation of the second union, i.e. whether the child lived in the household at the time of the formation of the second union or not. Our last alternative combines all pre-union children, regardless of whether they belong to the male or female partner, and only distinguishes between pre-union children living in the current household or not living in the household at the time of the formation of the second union (Table 3, Model 3).

The effect coefficients on pre-union children in Table 3 suggest that the intensity of the conception of a first common child in a second union depends essentially on pre-union children living in the household (Model 3) and on whose children one considers (Model 2).

Having more than one pre-union child living in the household at the time of the formation of the second union significantly decreases the intensity of the conception of a first common child as compared to the baseline level of no child in the common household. This result holds irrespective of whether we refer to the total number of pre-union children living in the household (Model 3) or to a gender-specific variable as in Model 2 [Note 15]. This correspondence no longer holds if there is a pre-union child present. The presence of one pre-union child living in the household at the time of the formation of the second union does not effect the rate at which the conception of a first common child occurs (as compared to having no pre-union child living in the household) if it is the *woman's child*, but it significantly increases the intensity of the conception of a first common child if it is the *man's child* (Model 2). Later on we show that it is a special combination of a woman's and a man's pre-union children living in the household that determines this high intensity.

As these results suggest, we can represent the variable pre-union children for children not living in the household as a total number of children for the couple but we should use a more detailed definition for pre-union children living in the household (Model 4). For children living in the household at the time of the formation of the second union it is important to distinguish whose children they are.

The effect coefficients on the other covariates included in our regressions are robust across the four models (Table 3). While the woman's age at the start of the second union is significant – the intensity of the conception of a first common child decreases with increasing age – the man's age at the start of the second union does not significantly influence the intensity of a conception. This result supports the general findings that the woman's biological age is an important factor as regards fertility in second unions but that the man's age is not. The intensity of the conception of a first child is twice as high for married couples as it is for couples who are cohabiting. The intensity is higher during the pre-cohabitation time than it is in the cohabitational period, but not significantly. The calendar period of observation turns out not to be significant, but there seems to be some increase in the conception intensity over calendar time.

For the duration variable we observe a non-monotonic shape. The highest intensity of the conception of a first common child is observed from the 10th to the 15th month of observation. For 71.3 per cent of our respondents this period corresponds to the first half year after moving in together. For the period from the 16th to the 21st month, which corresponds to the second half of the first year after union formation for the majority of respondents, the intensity of the conception of the first child does not differ significantly from the baseline level of conceiving a child in the period from the 10th to 15th month. But from the 22nd month (the second year after union formation) onward, we observe a pronounced decline in the intensity of the conception of a first common child. From the fifth year onward, the intensity of the conception of a first common child is only one tenth of the baseline level.

To check the proportionality assumption of the proportional hazard model for model 4 we have tested for interactions between the duration variable and each covariate included. Several interactions turned out to be significant: one with the woman's pre-union children living in the household and the other with the man's pre-union children living in the household. We present the results by referring to a three-way interaction between the man's children, the woman's children and the duration of the second union ([Note 16], Figure 1). Conception during the first nine months, which for the majority of the respondents is the time before moving in together, is highest for couples where the woman has no children and the man will bring one or two pre-union child(ren) into the new household (f0-m1+). These findings might reflect the desire of a childless woman to have a biological child with her partner as soon as possible if he brings a child into the household. Moreover, they show that the characteristics of both partners should be taken into consideration to examine the influence of each partner on the timing of the conception of the first child (see also [Corijn et al. 1996]). Similarly, [Thomson and Hoem 1998] found that couples had a higher risk of birth when the man had a child before the current union than when the man had no children. As a consequence of the high quality of the Austrian data we were able to disentangle the effect of the residence of children and locate that the effect stems from the man's pre-union children living in the same household.

Further interactions that proved to be statistically but not substantively significant are relegated to Appendix A.

To control for characteristics of the preceding union (which are only available for the respondent) we run regressions for female and male respondents separately (Table 4 and Table 5). In fact, running gender-specific models might reveal another important aspect of our set-up that has been neglected so far. Recalling that we can only determine the order of the union for the respondent, the models in Table 3 neglect the fact that women whose second union we consider may be different from women that are partners of men whose second union we consider. It might be a reasonable assumption that men who enter a second union are more likely to have female partners for whom it might be the first union. On the other hand, women who enter their second union might be more likely to have male partners for whom it is already the second or a higher-order union [Note 17]. Hence, gender-specific models may result in differing effect coefficients on gender-specific variables, although we have not yet found any significant influence of the covariate "gender" on the conception intensities in models where both sexes are combined.

Gender-specific models show no significant influence on first conception intensities of the analysed characteristics of the first union, i.e. the dissolution type of the former union and whether or not the respondent was formerly married. We could not find a reduced risk of a first common child if the male respondent was formerly married, as [Heekerens 1986] did for German data and [Griffith et al. 1985] for U.S. data. Nor did we find a higher risk for previously widowed women compared to women whose first marriage ended in divorce, as was found for American data by [Wineberg 1990] [Note 18].

The effect coefficients on the other covariates are pretty much consistent with the results in Table 3 – with some exceptions that might well be caused by the previously mentioned caveat that the behavior of female respondents might differ from that of female partners of male respondents whose second union we consider. Most striking is the fact that among all pre-union children the presence of the man's children in the household have an effect on the conception of the first shared child only for female respondents and not for male respondents. Further investigation shows that, again, this effect is caused by couples with the following characteristics: the woman – whose second union we are concentrating on – is still childless and the man brings one pre-union child into the common household.

The importance of the age of the youngest child for subsequent fertility decisions has been stressed unambiguously in the literature and is verified in our analysis as well (Table 5). Women who have two (or more) pre-union children and whose youngest child is between five and seven years of age have a significantly lower risk of conceiving a first common child in a second union. If a woman has one or more pre-union children all under the age of five, there is no significant age effect of the youngest child nor any significant difference from childless women. Note that the  variable "age of youngest child" is organized according to the number of pre-union children.

This is in contrast to the findings in [Griffith et al. 1985], where it is independent of the number of children. Furthermore a test on the proportionality assumption reveals an interaction between the age of the youngest child and the duration variable (cf. Appendix B).

## 5. Discussion

In this study we have considered the intensity of the conception of a first shared child among couples where the current union is the second union for at least one partner. Half of these couples had a child in their second union, which is consistent with the level of childbearing following remarriage found by [Griffith et al. 1985] and [Kucera 1984]. Among those who had a child in their second union, six out of ten conceived the child within the first two years. And among this group, three out of ten conceptions occurred even before the couple moved into a joint household. For the majority of couples, the shared pregnancy came rather quickly.

We sum up our results by considering the value a first child may confer if pre-union children are present as opposed to the situation where the first shared child in the second union is the first child for both partners.

The rate at which a childless respondent has a first shared conception is independent of the partner's number of children, and it is not higher than for respondents who already have a pre-union child. We therefore conclude that our results do not support the presence of a parenthood effect. The explanation that a stepchild may substitute for a biological child and hence counteract the parenthood effect for childless partners does not seem to be valid either, for we could not find a significant interaction between the woman's and the man's pre-union children. However, the union commitment effect is present both for female and male respondents when they have fewer than two pre-union children, as it is if we restrict the hypothesis to pre-union children not living in the household at the time of the formation of the second union (compare Model 4, Table 3). These results are in agreement with the findings of [Kucera 1984] but in contrast to those of [Vikat et al. 1999] and [Griffith et al. 1985], where the union commitment effect is independent of the number of pre-union children. These differing results could stem from differences in information about the partner's pre-union children contained in these studies. In the study by [Vikat et al. 1999] information on the partner's pre-union children is restricted to responses to the question 'Did the partner have any children who joined the current union?' By contrast, our study allows us to control for the exact number of pre-union children from either partner.

An unambiguous result of our study is the difference in the effect of pre-union children between those that join the newly formed household and those that do not. Our results clearly indicate that the rate at which a first child is conceived in a second union is influenced predominantly by pre-union children who live in the household at the time of union formation. These findings are also different from those of [Vikat et al. 1999]'s for Sweden, where almost no differences in the rate of a first child were found regarding resident vs. non resident pre-union children. In interpreting these conclusions we again have to keep in mind the exceptionally good quality of the Austrian data with regard to information on the partner's pre-union children. Moreover, our findings of a fertility-reducing impact if there are at least two pre-union children

living in the household corresponds to the results reported in [Kucera 1984] and [Toulemon 1997].

The Swedish study [Vikat et al. 1999] has shown that a man's parity counts as much as the female partner's parity in determining a couple's shared parity. This is also the case for Austria, but in the Austrian data the man's parity counts even more if he has a pre-union child living in the household (Model 4 in Table 3). This result is in accordance with the findings in [Toulemon 1997], who found that the risk of having a first shared birth increases if the man had a pre-union child living in the household. But as we have shown in Figure 1, the higher intensity of the conception of a first common child for couples where the man brings a child into the household only holds when the woman has no pre-union child living in the household at the time of formation of the second union. These results demonstrate that a first common child is conceived at a rate which not only depends on the man's and the woman's parity separately but also on the combination of the two. Even more specifically, the elevated intensity of the conception of a first common child for such couples will only hold during the first nine months after the start of the second union (compare Figure 1). This could indicate that the woman strongly wants to have a common biological child very quickly after the start of the union.

To control not only for the woman's and the man's parity but also for the age of the youngest child at the start of the union, we have had to restrict our analysis to female respondents only. The results (Table 5 and Figure 2) show that the age of the youngest child at the start of the union has an important influence on the rate at which a first common child is conceived in the second union. Not only do we observe higher first conception intensities if the youngest child is under the age of five at the start of the second union, our results also indicate that the intensity of conception may increase with the duration of the second union for those couples.

Though we could not find any significant effect of the sex of the respondent in models where we combined both sexes, running separate models for male and female respondents highlights an important difference: Female respondents in their second union may be different from female partners in unions that are the second ones for male respondents. Of all pre-union children only those from the male partner living in the household have an effect on the rate of conception of the first shared child. Though no firm conclusions can be drawn, these results suggest that it is important to consider not only whose pre-union children are living in the common household but it seems to be equally important to control better for whose second union we are actually considering. Further effort has to be put into complementing childbearing histories of both partners with partnership histories of both partners. Only when such data are available can we better judge how robust the effects of pre-union children will be across various combinations of partnership histories.

## 6. Acknowledgments

# Notes

1. The fact that stepfamilies play a considerable role in the Austrian society has also been demonstrated in the study 'Kindsein in Österreich' by [Wilk 1998]. Among a representative sample of 2,745 children aged 10 who were interviewed in 1993 on various topics related to their family, school, spare-time, etc., about 6 to 8 per cent reported that they lived in a stepfamily.

2. Note that we use the respondent's order of the union as the defining characteristic of stepfamilies as opposed to the common definition of stepfamilies that relies on the presence of pre-union children of either the respondent or the partner. Our definition of stepfamilies therefore excludes possible first unions of respondents where pre-union children are already present and, on the other hand, we include second unions where neither the respondent nor the partner has any pre-union children. The latter assumption is used so as to compare stepfamily fertility, i.e., if at least one partner has pre-union children, with fertility if no pre-union children are present. The selection criteria of considering second unions only will be discussed in section 2.

3. In the Austrian Family and Family Survey approximately 49% of all male and 51% of all female respondents indicated two children as the ideal norm for a family [UNECE/UNPF 1999].

4. The beginning of a union is defined as the point in time the couple starts living together and sharing a common household.

5. 16.3 per cent of all respondents recorded a second or even higher-order union.

6. This number differs when we distinguish between male and female respondents. It is 76.0 per cent for male and 83.6 per cent for female respondents.

7. Pregnancies that did not lead to a live birth or an abortion were not considered in our analyses since the data available do not include such information.

8. In Austria a third of all children of parity one are conceived before marriage and born after marriage formation, the pregnancy being the incentive for the marriage. Although the first common child in a second union can be of parity two or higher and despite of the fact that the above percentage does not directly refer to second unions considered in our paper, one should keep in mind a couple's tendency to marry when the woman is pregnant.

9. This restriction allows sufficient time for childbearing in a second union for those desiring a child.

10. The exclusion of those who had a birth shortly before the union formation is similar as in [Griffith et al. 1985]. Children born more than 11 month before the formation of the second union are considered as pre-union children.

11. Our data set includes five records where the first child of the second union was conceived within the second union but born after the end of the second union. In none of the five cases was a third union recorded to which the child might have been assigned if the third union had been formed soon after the end of the second union.

12. We thank Elizabeth Thomson for the suggestion that we should conduct methodological studies to verify whether men and women are equally good reporters of their own and their partner's children. In U.S. data Elisabeth Thomson found that men's reports of union and birth dates have more inconsistencies than do corresponding reports of women. Among those 38 respondents who underreported stepchildren 17 were women, and almost the same number (21 persons) were men, which corresponds to 3.4 per cent among female and 10.6 per cent among male respondents. We thereby confirm Thomson's findings for our Austrian data as well.

13. We are grateful to Hans-Peter Kohler for suggesting this alternative viewpoint to us.

14. Only in the case that the couple was not married at union formation the respondent was asked whether the partner was single, married, widowed, divorced or separated at the time of union formation. If the couple was married when they moved into a joint household, this question was not posed and we have incomplete information on the partner's previous union. This is why we had to run gender-specific regressions.

15. Our sample includes only one occurrence where the man brought two children into the common household. The corresponding coefficient is significant and very small (0.11). To see whether our model is robust, we excluded this one case. The coefficient for "one child of the man living in the household" then changed from 3.18 to 3.13, which is still significant. In a second step we formed two categories for the man's pre-union children living in the household at the time of the formation of the second union, namely "none" and "one or more". In this case the covariate "man's pre-union children living in the household" is no longer significant, indicating that the opposite and significant effects for "one" (3.18) and "two or more" (0.11) "neutralise" to 1.27, which is no longer significant. We therefore retain three levels of the covariate "man's pre-union children living in the household".

16. Note that we have combined various levels of the three-way interactions, in particular we have reduced the duration variable to at most 4 levels.

17. This argument is supported by the following observation: the percentage of childless female partners in second unions of male respondents is nearly twice as high (81.41 per cent) that of

childless female respondents (46.17 per cent). If we assume that women with pre-union children have also had previous unions to a higher extent, our argument follows.

18. While about half of all respondents reported that they have formerly been married, widowed respondents constitute a very distinct group: four per cent of female and two per cent of male respondents were widowed.

19. The interaction between woman's age and  man's age is not significant, nor is a three-way interaction between woman's, man's age, and duration.

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## Appendix A:

The shape of the duration effect differs across the woman's and the man's age groups (Figure 3 and Figure 4). For women the baseline hazard is slightly altered for the age group 25–29. Not only is this the age group that exhibits the highest intensity of a first child. In addition, the duration across which this intensity can be observed is prolonged up to the 21st month as compared to the baseline hazard in Model 4 (Table 3), where the highest intensity could be observed from the 10th to the 15th month. For the man's age the baseline hazard is shifted to the right in the age group 25–29, i.e., the highest intensity of the conception of a first child is observed from the 16th to the 21st month. In contrast, the highest intensities of the baseline hazard for the other age groups are observed already from the 10th to the15th month [Note 19].

In order to test whether the duration variable differs according to marital status we recoded the two covariates into one, since the level "pre-cohabiting" is only defined for the period before moving into a joint household, i.e. for the first nine months of the duration variable. A model with a combination of marital status and duration has the following structure (Figure 5): Married couples have the highest intensities for all time intervals since the start of the second union. Especially during the time period from the 10th to the 21st month, which corresponds to the first half year after marriage for the majority of the respondents, the intensity for conceiving a first common child is very pronounced. Couples for which we have defined the time of exposure as starting prior to moving in together have a slightly increased risk of conception shortly before cohabiting (as indicated by the blue line for months 6 to 9) compared to couples who already live together (as indicated by the red line).

## Appendix B:

As indicated in Figure 2, for mothers with one pre-union child below the age of five we can observe a bi-modal shape of the duration variable. For this group of women, the intensity of conception of a first shared child attains a second peak between months 34 and 46, which corresponds to the third year after union formation for the majority of respondents. This result might manifest the ambiguous role of the age of the youngest child as outlined in section 3. On the one hand, a pre-union child that is younger at union formation may substitute for a biological child for the step-parent and hence decrease the intensity of conception. On the other hand, it may increase the intensity of conception of a first child since a young child is more likely to act as a brother or sister towards this child. Obviously, the latter result seems to outweigh the former during the interval from the 10th to 15th month, while the former effect may become relevant for months 34 to 46. At this time the youngest child will already be too old to substitute so well for a biological child of the step-parent. The argument would be that the relationship that step-parents develop with their step-children may vary in accordance with the age of the step-children and consequently childbearing plans may be revised. An alternative explanation for the occurrence of the second mode is offered in [Cherlin 1992], where it is argued that a certain time of adjustment between the child(ren) and the new partner is needed and this process may well influence the decision whether or not to have a common child in the new union. This process would then result in a conception intensity that might increase with time.

**Appendix Table 1:**

Basic counts in the present analysis

| Factor | Occurrences and exposures distributed over selected characteristics | | | Respondents distributed by characteristics | |
|---|---|---|---|---|---|
| | Occurences | Exposures | | Number of | |
| | | Half-months | Per cent | Respondents | Per cent |
| FIXED CHARACTERISTICS | | | | | |
| Woman's pre-union children | | | | | |
| 0 | 194 | 32,895 | 48.59 | 391 | 56.3 |
| 1 | 109 | 18,934 | 27.97 | 190 | 27.3 |
| 2-10 | 36 | 15,864 | 23.44 | 114 | 16.4 |
| Man's pre-union children | | | | | |
| 0 | 259 | 47,109 | 69.59 | 509 | 73.2 |
| 1 | 54 | 8,893 | 13.14 | 103 | 14.8 |
| 2-6 | 26 | 11,691 | 17.27 | 83 | 11.9 |
| Woman's pre-union children living in the household at the time of the formation of the second union | | | | | |
| 0 | 200 | 34,996 | 51.70 | 406 | 58.4 |
| 1 | 108 | 19,433 | 28.71 | 189 | 27.2 |
| 2-4 | 31 | 13,264 | 19.59 | 100 | 14.4 |
| Woman's pre-union children not living in the household at the time of the formation of the second union | | | | | |
| 0 | 328 | 63,098 | 93.21 | 664 | 95.5 |
| 1 | 9 | 2,549 | 3.77 | 21 | 3.0 |
| 2-7 | 2 | 2,046 | 3.02 | 10 | 1.4 |
| Man's pre-union children living in the household at the time of the formation of the second union | | | | | |
| 0 | 322 | 62,972 | 93.03 | 658 | 94.7 |
| 1 | 16 | 1,751 | 2.59 | 25 | 3.6 |
| 2-5 | 1 | 2,970 | 4.39 | 12 | 1.7 |
| Man's pre-union children not living in the household at the time of the formation of the second union | | | | | |
| 0 | 275 | 49,747 | 73.49 | 537 | 77.3 |
| 1 | 39 | 8,902 | 13.15 | 88 | 12.7 |
| 2-5 | 25 | 9,044 | 13.36 | 70 | 10.1 |
| Pre-union children living in the household at the time of the formation of the second union | | | | | |
| 0 | 189 | 32,861 | 48.54 | 385 | 55.4 |
| 1 | 114 | 18,530 | 27.37 | 196 | 28.2 |
| 2-5 | 36 | 16,302 | 24.08 | 114 | 16.4 |
| Pre-union children not living in the household at the time of the formation of the second union | | | | | |
| 0 | 268 | 47,401 | 70.02 | 519 | 74.7 |
| 1 | 44 | 9,655 | 14.26 | 97 | 14.0 |
| 2-6 | 27 | 10,637 | 15.71 | 79 | 11.4 |
| Woman's age at the start of the second union | | | | | |
| 15-24 | 170 | 27,852 | 41.14 | 314 | 45.2 |
| 25-29 | 122 | 17,926 | 26.48 | 222 | 31.9 |
| 30-34 | 35 | 13,656 | 20.17 | 102 | 14.7 |
| 35-39 | 9 | 8,031 | 11.86 | 53 | 7.6 |
| No answer | 3 | 228 | 0.34 | 4 | 0.6 |

**Appendix Table 1 (cont'd):**

Basic counts in the present analysis

| Factor | Occurrences and exposures distributed over selected characteristics | | | Respondents distributed by characteristics | |
|---|---|---|---|---|---|
| | Occurences | | Exposures | Number of | |
| | | Half-months | Per cent | Respondents | Per cent |
| Man's age at the start of the second union | | | | | |
| 14-24 | 111 | 17,676 | 26.11 | 214 | 30.8 |
| 25-29 | 104 | 19,124 | 28.25 | 200 | 28.8 |
| 30-34 | 78 | 14,669 | 21.67 | 151 | 21.7 |
| 35-39 | 27 | 7,402 | 10.93 | 66 | 9.5 |
| 40-44 | 10 | 4,635 | 6.85 | 35 | 5.0 |
| 45-49 | 1 | 2,119 | 3.13 | 13 | 1.9 |
| 50-61 | 1 | 820 | 1.21 | 4 | 0.6 |
| No answer | 7 | 1,248 | 1.84 | 12 | 1.7 |
| Gender | | | | | |
| Male | 76 | 17,329 | 74.40 | 199 | 28.63 |
| Female | 263 | 50,364 | 25.60 | 496 | 71.37 |
| | | | | | |
| TIME-VARYING CHARACTERISTICS | | | | | |
| | | | | | |
| Marital status | | | | | |
| Pre-cohabitation | 56 | 9,413 | 13.91 | | |
| Cohabiting | 162 | 36,722 | 54.25 | | |
| Married | 121 | 21,558 | 31.85 | | |
| Calendar time period | | | | | |
| 1963 – 1973 | 18 | 2,832 | 4.18 | | |
| 1974 – 1979 | 42 | 6,852 | 10.12 | | |
| 1980 – 1987 | 103 | 20,042 | 29.61 | | |
| 1988 – 1989 | 42 | 8,197 | 12.11 | | |
| 1990 – 1992 | 69 | 14,098 | 20.83 | | |
| 1993 – 1996 | 65 | 15,672 | 23.15 | | |
| Duration in months since the start of the second union | | | | | |
| $1^{st} – 5^{th}$ | 31 | 6,792 | 10.03 | | |
| $6^{th} – 9^{th}$ | 37 | 5,142 | 7.60 | | |
| $10^{th} – 15^{th}$ | 68 | 6,940 | 10.25 | | |
| $16^{th} – 21^{st}$ | 48 | 5,864 | 8.66 | | |
| $22^{nd} – 33^{rd}$ | 47 | 9,149 | 13.52 | | |
| $34^{th} – 45^{th}$ | 45 | 6,895 | 10.19 | | |
| $46^{th} – 69^{th}$ | 42 | 8,975 | 13.26 | | |
| $70^{th}$ and later | 21 | 17,936 | 26.50 | | |
| | | | | | |
| Total number | 339 | 67,693 | 100.0 | 695 | 100.0 |

**Appendix Table 2:**

Basic counts in the present analysis, female respondents

| Factor | Occurrences and exposures distributed over selected characteristics | | | Respondents distributed by characteristics | |
|---|---|---|---|---|---|
| | Occurences | Exposures | | Number of | |
| | | Half-months | Per cent | Respondents | Per cent |
| FIXED CHARACTERISTICS | | | | | |
| Woman's pre-union children | | | | | |
| 0 | 130 | 19,993 | 39.70 | 229 | 46.17 |
| 1 | 98 | 16,362 | 32.49 | 166 | 33.47 |
| 2-10 | 35 | 14,009 | 27.82 | 101 | 20.36 |
| Man's pre-union children | | | | | |
| 0 | 209 | 37,011 | 73.49 | 381 | 76.81 |
| 1 | 33 | 6,023 | 11.96 | 63 | 12.70 |
| 2-6 | 21 | 7,330 | 14.55 | 52 | 10.48 |
| Woman's pre-union children living in the household at the time of the formation of the second union | | | | | |
| 0 | 135 | 21,264 | 42.22 | 238 | 47.98 |
| 1 | 97 | 16,538 | 32.84 | 164 | 33.06 |
| 2-4 | 31 | 12,562 | 24.94 | 94 | 18.95 |
| Woman's pre-union children not living in the household at the time of the formation of the second union | | | | | |
| 0 | 253 | 47,214 | 93.75 | 474 | 95.56 |
| 1 | 9 | 1,642 | 3.26 | 16 | 3.23 |
| 2-7 | 1 | 1,508 | 2.99 | 6 | 1.21 |
| Man's pre-union children living in the household at the time of the formation of the second union | | | | | |
| 0 | 252 | 48,245 | 95.79 | 477 | 96.17 |
| 1 | 10 | 1,352 | 2.68 | 16 | 3.23 |
| 2-5 | 1 | 767 | 1.52 | 3 | 0.60 |
| Man's pre-union children not living in the household at the time of the formation of the second union | | | | | |
| 0 | 219 | 37,792 | 75.04 | 394 | 79.44 |
| 1 | 24 | 5,572 | 11.06 | 52 | 10.48 |
| 2-5 | 20 | 7,000 | 13.90 | 50 | 10.08 |
| Pre-union children living in the household at the time of the formation of the second union | | | | | |
| 0 | 130 | 20,671 | 41.04 | 231 | 46.57 |
| 1 | 97 | 16,020 | 31.81 | 164 | 33.06 |
| 2-5 | 36 | 13,673 | 27.15 | 101 | 20.36 |
| Pre-union children not living in the household at the time of the formation of the second union | | | | | |
| 0 | 212 | 35,672 | 70.83 | 378 | 76.21 |
| 1 | 29 | 6,811 | 13.52 | 63 | 12.70 |
| 2-6 | 22 | 7,881 | 15.65 | 55 | 11.09 |
| Woman's age at the start of the second union | | | | | |
| 15-25 | 133 | 20,072 | 39.85 | 212 | 42.74 |
| 25-29 | 95 | 14,113 | 28.02 | 167 | 33.67 |
| 30-34 | 30 | 10,969 | 21.78 | 83 | 16.73 |
| 35-39 | 5 | 5,210 | 10.34 | 34 | 6.85 |
| No answer | 0 | 0 | 0.00 | 0 | 0.00 |
| Man's age at the start of the second union | | | | | |
| 14-25 | 97 | 14,319 | 28.43 | 161 | 32.46 |
| 25-29 | 76 | 14,272 | 28.34 | 142 | 28.63 |
| 30-34 | 57 | 9,459 | 18.78 | 99 | 19.96 |
| 35-39 | 19 | 5,088 | 10.10 | 46 | 9.27 |
| 40-44 | 5 | 3,101 | 6.16 | 21 | 4.23 |
| 45-49 | 1 | 2,057 | 4.08 | 11 | 2.22 |
| 50-61 | 1 | 820 | 1.63 | 4 | 0.81 |
| No answer | 7 | 1,248 | 2.48 | 12 | 2.42 |
| Dissolution type of the first union | | | | | |
| Divorced | 256 | 43,498 | 86.37 | 452 | 91.13 |
| Widowed | 8 | 2,966 | 5.89 | 21 | 4.23 |
| No answer | 14 | 2,269 | 4.51 | 23 | 4.64 |

**Appendix Table 2 (cont'd):**

Basic counts in the present analysis, female respondents

| Factor | Occurrences and exposures distributed over selected characteristics | | | Respondents distributed by characteristics | |
|---|---|---|---|---|---|
| | Occurences | | Exposures | Number of | |
| | | Half-months | Per cent | Respondents | Per cent |
| Formerly married | | | | | |
| No | 125 | 17,420 | 34.59 | 222 | 44.76 |
| Yes | 152 | 30,972 | 61.50 | 271 | 54.64 |
| No answer | 1 | 341 | 0.68 | 3 | 0.60 |
| | | | | | |
| Age of the youngest child at the start of the second union | | | | | |
| No child | 130 | 19,993 | 39.70 | 229 | 46.2 |
| 1 child 1-36 months | 32 | 5,117 | 10.16 | 51 | 10.3 |
| 1 child 37-60 months | 34 | 4,216 | 8.37 | 50 | 10.1 |
| 1 child 61-84 months | 12 | 2,351 | 4.67 | 23 | 4.6 |
| 1 child 85+ months | 20 | 4,678 | 9.29 | 42 | 8.5 |
| 2+ children 1-36 months | 7 | 2,101 | 4.17 | 17 | 3.4 |
| 2+ children 37-60 months | 12 | 3,083 | 6.12 | 27 | 5.4 |
| 2+ children 61-84 months | 4 | 3,601 | 7.15 | 23 | 4.6 |
| 2+ children 85+ months | 12 | 5,224 | 10.37 | 34 | 6.9 |
| | | | | | |
| TIME-VARYING CHARACTERISTICS | | | | | |
| | | | | | |
| Marital status | | | | | |
| Pre-cohabitation | 43 | 6,815 | 13.53 | | |
| Cohabiting | 124 | 26,984 | 53.58 | | |
| Married | 96 | 16,565 | 32.89 | | |
| Calendar time period | | | | | |
| 1963 – 1973 | 16 | 2,170 | 4.31 | | |
| 1974 – 1979 | 37 | 5,744 | 11.40 | | |
| 1980 – 1987 | 85 | 15,527 | 30.83 | | |
| 1988 – 1989 | 32 | 5,864 | 11.64 | | |
| 1990 – 1992 | 45 | 9,950 | 19.76 | | |
| 1993 – 1996 | 48 | 11,109 | 22.06 | | |
| Duration in months since the start of the second union | | | | | |
| $1^{st} – 5^{th}$ | 20 | 4,854 | 9.64 | | |
| $6^{th} – 9^{th}$ | 31 | 3,683 | 7.31 | | |
| $10^{th} – 15^{th}$ | 50 | 4,946 | 9.82 | | |
| $16^{th} – 21^{st}$ | 33 | 4,198 | 8.34 | | |
| $22^{nd} – 33^{rd}$ | 40 | 6,725 | 13.35 | | |
| $34^{th} – 45^{th}$ | 39 | 5,085 | 10.10 | | |
| $46^{th} – 69^{th}$ | 31 | 6,664 | 13.23 | | |
| $70^{th}$ and later | 19 | 14,209 | 28.21 | | |
| | | | | | |
| Total number | 263 | 50,364 | 100.0 | 496 | 100.0 |

**Appendix Table 3:**

Basic counts in the present analysis, male respondents

| Factor | Occurrences and exposures distributed over selected characteristics | | | Respondents distributed by characteristics | |
|---|---|---|---|---|---|
| | Occurences | Exposures | | Number of | |
| | | Half-months | Per cent | Respondents | Per cent |
| FIXED CHARACTERISTICS | | | | | |
| Woman's pre-union children | | | | | |
| 0 | 64 | 12,902 | 74.45 | 162 | 81.41 |
| 1 | 11 | 2,572 | 14.84 | 24 | 12.06 |
| 2-10 | 1 | 1,855 | 10.70 | 13 | 6.53 |
| Man's pre-union children | | | | | |
| 0 | 50 | 10,098 | 58.27 | 128 | 64.32 |
| 1 | 21 | 2,870 | 16.56 | 40 | 20.10 |
| 2-6 | 5 | 4,361 | 25.17 | 31 | 15.58 |
| Woman's pre-union children living in the household at the time of the formation of the second union | | | | | |
| 0 | 65 | 13,732 | 79.24 | 168 | 84.42 |
| 1 | 11 | 2,895 | 16.71 | 25 | 12.56 |
| 2-4 | 0 | 702 | 4.05 | 6 | 3.02 |
| Woman's pre-union children not living in the household at the time of the formation of the second union | | | | | |
| 0 | 75 | 15,884 | 91.66 | 190 | 95.48 |
| 1 | 0 | 907 | 5.23 | 5 | 2.51 |
| 2-7 | 1 | 538 | 3.10 | 4 | 2.01 |
| Man's pre-union children living in the household at the time of the formation of the second union | | | | | |
| 0 | 70 | 14,727 | 84.98 | 181 | 90.95 |
| 1 | 6 | 399 | 2.30 | 9 | 4.52 |
| 2-5 | 0 | 2,203 | 12.71 | 9 | 4.52 |
| Man's pre-union children not living in the household at the time of the formation of the second union | | | | | |
| 0 | 56 | 11,955 | 68.99 | 143 | 71.86 |
| 1 | 15 | 3,330 | 19.22 | 36 | 18.09 |
| 2-5 | 5 | 2,044 | 11.80 | 20 | 10.05 |
| Pre-union children living in the household at the time of the formation of the second union | | | | | |
| 0 | 59 | 12,190 | 70.34 | 154 | 77.39 |
| 1 | 17 | 2,510 | 14.48 | 32 | 16.08 |
| 2-5 | 0 | 2,629 | 15.17 | 13 | 6.53 |
| Pre-union children not living in the household at the time of the formation of the second union | | | | | |
| 0 | 56 | 11,729 | 67.68 | 141 | 70.85 |
| 1 | 15 | 2,844 | 16.41 | 34 | 17.09 |
| 2-6 | 5 | 2,756 | 15.90 | 24 | 12.06 |
| Woman's age at the start of the second union | | | | | |
| 15-25 | 37 | 7,780 | 44.90 | 102 | 51.26 |
| 25-29 | 27 | 3,813 | 22.00 | 55 | 27.64 |
| 30-34 | 5 | 2,687 | 15.51 | 19 | 9.55 |
| 35-39 | 4 | 2,821 | 16.28 | 19 | 9.55 |
| No answer | 3 | 228 | 1.32 | 4 | 2.01 |
| Man's age at the start of the second union | | | | | |
| 14-25 | 14 | 3,357 | 19.37 | 53 | 26.63 |
| 25-29 | 28 | 4,852 | 28.00 | 58 | 29.15 |
| 30-34 | 21 | 5,210 | 30.07 | 52 | 26.13 |
| 35-39 | 8 | 2,314 | 13.35 | 20 | 10.05 |
| 40-44 | 5 | 1,534 | 8.85 | 14 | 7.04 |
| 45-49 | 0 | 62 | 0.36 | 2 | 1.01 |
| 50-61 | 0 | 0 | 0.00 | 0 | 0.00 |
| No answer | 0 | 0 | 0.00 | 0 | 0.00 |
| Dissolution type of the first union | | | | | |
| Divorced | 79 | 14,379 | 82.98 | 190 | 95.48 |
| Widowed | 1 | 915 | 5.28 | 3 | 1.51 |
| No answer | 3 | 528 | 3.05 | 6 | 3.02 |

**Appendix Table 3 (cont'd):**

Basic counts in the present analysis, male respondents

| Factor | Occurrences and exposures distributed over selected characteristics | | | Respondents distributed by characteristics | |
|---|---|---|---|---|---|
| | Occurences | | Exposures | Number of | |
| | | Half-months | Per cent | Respondents | Per cent |
| Formerly married | | | | | |
| No | 31 | 6,246 | 36.04 | 95 | 47.74 |
| Yes | 51 | 9,469 | 54.64 | 103 | 51.76 |
| No answer | 1 | 107 | 0.62 | 1 | 0.50 |
| | | | | | |
| TIME VARYING CHARACTERISTICS | | | | | |
| | | | | | |
| Marital status | | | | | |
| Pre-cohabitation | 13 | 2,598 | 14.99 | | |
| Cohabiting | 38 | 9,738 | 56.19 | | |
| Married | 25 | 4,993 | 28.81 | | |
| Calendar time period | | | | | |
| 1963 – 1973 | 2 | 662 | 3.82 | | |
| 1974 – 1979 | 5 | 1,108 | 6.39 | | |
| 1980 – 1987 | 18 | 4,515 | 26.05 | | |
| 1988 – 1989 | 10 | 2,333 | 13.46 | | |
| 1990 – 1992 | 24 | 4,148 | 23.94 | | |
| 1993 – 1996 | 17 | 4,563 | 26.33 | | |
| Duration in months since the start of the second union | | | | | |
| $1^{st} - 5^{th}$ | 11 | 1,938 | 11.18 | | |
| $6^{th} - 9^{th}$ | 6 | 1,459 | 8.42 | | |
| $10^{th} - 15^{th}$ | 18 | 1,994 | 11.51 | | |
| $16^{th} - 21^{st}$ | 15 | 1,666 | 9.61 | | |
| $22^{nd} - 33^{rd}$ | 7 | 2,424 | 13.99 | | |
| $34^{th} - 45^{th}$ | 6 | 1,810 | 10.44 | | |
| $46^{th} - 69^{th}$ | 11 | 2,311 | 13.34 | | |
| $70^{th}$ and later | 2 | 3,727 | 21.51 | | |
| Total number | 76 | 17,329 | 100 | 199 | 100 |

**Table 1a:**

Cross-tabulation of  marriages by marital status of bride and groom, Austria 1998

|  | Groom single | Groom widowed | Groom divorced |
|---|---|---|---|
| Bride single | 26,846 (68.6%) | 173 (0.4%) | 3,663 (9.4%) |
| Bride widowed | 109 (0.3%) | 65 (0.2%) | 163 (0.4%) |
| Bride divorced | 3,575 (9.1%) | 299 (0.8%) | 4,250 (10.9%) |

Source:   [Austrian Central Statistical Office 2000]
Remark:  Numbers in brackets indicate the percentage in each cell

**Table 1b:**

Existence of pre-union children among unions of different order in Austria

|  | First union | Second union | Third union | Fourth and higher union | All unions |
|---|---|---|---|---|---|
| Neither partner | 82.1 % | 38.8 % | 38.9 % | 39.5 % | 74.9 % |
| Only partner | 4.1 % | 7.4 % | 6.7 % | 15.8 % | 4.7 % |
| Only respondent | 10.5 % | 36.4 % | 27.5 % | 31.6 % | 14.6 % |
| Both partners | 2.9 % | 15.8 % | 22.8 % | 13.2 % | 5.2 % |
| No answer | 0.3 % | 1.6 % | 4.0 % | 0.0 % | 0.6 % |

Source:   FFS 1996, N = 5,065 first, 824 second, 149 third and 38 fourth or higher order unions

**Table 2:**

Number of respondents excluded from the analysis and censoring by cause

| | |
|---|---|
| Total number of records | 6,120 |

**A. Exclusions**

| Cause of Exclusion | Count of exclusion |
|---|---|
| Fewer than two unions | 5,296 |
| Foreigner | 29 |
| Child died/was adopted before formation of second union | 4 |
| Incomplete information on partner's pre-union children | 8 |
| Incomplete information on respondent's pre-union children | 10 |
| No answer on beginning or end of the second union | 13 |
| Woman's age at the time of the formation of the second union 40 years or above | 37 |
| Childbirth within 11 months before the formation of the second union | 16 |
| Conception of first child born in second union within first union | 12 |
| | |
| Sum of exclusions | 5,425 |

**B. Occurrences**

| | End date | |
|---|---|---|
| Conception of first child | date of conception[1] | 339 |

**C. Censored Cases**

| Cause[2] of censoring | Censoring date | Count of censored events |
|---|---|---|
| No child conceived | date of interview | 199 |
| Adoption of child | date of adoption | 2 |
| Death of a child born before the second union | date of death | 4 |
| Union disruption | date of union disruption | 151 |

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[1] We included ten couples where the woman was pregnant with the first child of the second union at the date of the interview. The date of conception was set equal to the expected date of birth minus nine months.

[2] All causes listed refer to the second union.

**Table 3:**

Relative risk of the conception of a first child in a second union; both sexes combined

|  | Model 1 | | Model 2 | | Model 3 | | Model 4 | |
|---|---|---|---|---|---|---|---|---|
|  |  | *p-value* |  | *p-value* |  | *p-value* |  | *p-value* |
| **Woman's pre-union children** |  | *0.014* |  |  |  |  |  |  |
| 0 | 1 |  |  |  |  |  |  |  |
| 1 | 1.18 |  |  |  |  |  |  |  |
| 2-10 | **0.67** |  |  |  |  |  |  |  |
| **Man's pre-union children** |  | *0.010* |  |  |  |  |  |  |
| 0 | 1 |  |  |  |  |  |  |  |
| 1 | 1.32 |  |  |  |  |  |  |  |
| 2-6 | **0.64** |  |  |  |  |  |  |  |
| **Woman's children in the hh\*** |  |  |  | *0.013* |  |  |  | *0.011* |
| 0 |  |  | 1 |  |  |  | 1 |  |
| 1 |  |  | 1.19 |  |  |  | 1.19 |  |
| 2-4 |  |  | **0.65** |  |  |  | **0.64** |  |
| **Woman's children not in the hh** |  |  |  | *0.755* |  |  |  |  |
| 0 |  |  | 1 |  |  |  |  |  |
| 1 |  |  | 1.30 |  |  |  |  |  |
| 2-7 |  |  | 0.87 |  |  |  |  |  |
| **Man's children in the hh** |  |  |  | *0.000* |  |  |  | *0.000* |
| 0 |  |  | 1 |  |  |  | 1 |  |
| 1 |  |  | **3.18** |  |  |  | **3.14** |  |
| 2-5 |  |  | **0.11** |  |  |  | **0.11** |  |
| **Man's children not in the hh** |  |  |  | *0.371* |  |  |  |  |
| 0 |  |  | 1 |  |  |  |  |  |
| 1 |  |  | 1.00 |  |  |  |  |  |
| 2-5 |  |  | 0.74 |  |  |  |  |  |
| **Children in the hh** |  |  |  |  |  | *0.002* |  |  |
| 0 |  |  |  |  | 1 |  |  |  |
| 1 |  |  |  |  | 1.25 |  |  |  |
| 2-5 |  |  |  |  | **0.63** |  |  |  |
| **Children not in the hh** |  |  |  |  |  | *0.438* |  | *0.327* |
| 0 |  |  |  |  | 1 |  | 1 |  |
| 1 |  |  |  |  | 0.99 |  | 1.02 |  |
| 2-6 |  |  |  |  | 0.76 |  | 0.74 |  |
| **Woman's age at the start of the second union\*\*** |  | *0.000* |  | *0.000* |  | *0.000* |  | *0.000* |
| 15-24 | 1 |  | 1 |  | 1 |  | 1 |  |
| 25-29 | 0.99 |  | 0.94 |  | 0.98 |  | 0.95 |  |
| 30-34 | **0.52** |  | **0.52** |  | **0.52** |  | **0.53** |  |
| 35-39 | **0.28** |  | **0.24** |  | **0.28** |  | **0.26** |  |
| **Man's age at the start of the second union** |  | *0.140* |  | *0.089* |  | *0.174* |  | *0.089* |
| 14-24 | 1 |  | 1 |  | 1 |  | 1 |  |
| 25-29 | 1.05 |  | 1.10 |  | 1.07 |  | 1.09 |  |
| 30-34 | 1.16 |  | 1.18 |  | 1.20 |  | 1.18 |  |
| 35-39 | 1.07 |  | 0.99 |  | 1.09 |  | 0.98 |  |
| 40-61 | **0.55** |  | **0.52** |  | 0.58 |  | **0.52** |  |
| **Gender** |  | *0.082* |  | *0.111* |  | *0.084* |  | *0.112* |
| Male | 1 |  | 1 |  | 1 |  | 1 |  |
| Female | 1.28 |  | 1.25 |  | 1.27 |  | 1.25 |  |
| **Marital status** |  | *0.000* |  | *0.000* |  | *0.000* |  | *0.000* |
| Pre-cohabitation | 1.33 |  | 1.34 |  | 1.35 |  | 1.34 |  |
| Cohabiting | 1 |  | 1 |  | 1 |  | 1 |  |
| Married | **2.02** |  | **2.13** |  | **2.10** |  | **2.12** |  |
| **Calendar time period** |  | *0.514* |  | *0.458* |  | *0.457* |  | *0.501* |
| 1963 – 1973 | 0.77 |  | 0.76 |  | 0.74 |  | 0.78 |  |
| 1974 – 1979 | 1 |  | 1 |  | 1 |  | 1 |  |
| 1980 – 1987 | 1.07 |  | 1.11 |  | 1.06 |  | 1.11 |  |
| 1988 – 1989 | 1.24 |  | 1.26 |  | 1.22 |  | 1.26 |  |
| 1990 – 1992 | 1.23 |  | 1.23 |  | 1.21 |  | 1.22 |  |
| 1993 – 1996 | 1.23 |  | 1.26 |  | 1.22 |  | 1.25 |  |

\* "in the hh" stands for "in the household at the formation of the second union"

\*\* We exclude records with no information on the partner's age.

**Table 3 (cont'd):**

Relative risk of the conception of a first child in a second union; both sexes combined

| | Model 1 | Model 2 | Model 3 | Model 4 |
|---|---|---|---|---|
| **Duration in months since the start of the second union** | *0.000* | *0.000* | *0.000* | *0.000* |
| $1^{st} - 5^{th}$ | **0.44** | **0.43** | **0.44** | **0.43** |
| $6^{th} - 9^{th}$ | 0.69 | 0.68 | 0.69 | 0.68 |
| $10^{th} - 15^{th}$ | 1 | 1 | 1 | 1 |
| $16^{th} - 21^{st}$ | 0.83 | 0.83 | 0.82 | 0.83 |
| $22^{nd} - 33^{rd}$ | **0.52** | **0.52** | **0.51** | **0.52** |
| $34^{th} - 45^{th}$ | **0.59** | **0.59** | **0.58** | **0.59** |
| $46^{th} - 69^{th}$ | **0.44** | **0.45** | **0.43** | **0.45** |
| $70^{th}$ and later | **0.11** | **0.10** | **0.10** | **0.10** |
| Intercept | 0.0031 | 0.0030 | 0.0031 | 0.0031 |

Remark: Numbers in boldface type indicate that the specific level is significantly different (at the 5 per cent level) from the baseline level.

**Table 4:**

Relative risk of the conception of a first child in a second union, gender-specific pre-union experiences

| | female respondent | | male respondent | |
|---|---|---|---|---|
| | | *p-value* | | *p-value* |
| **Woman's children in the hh** [*] | | *0.221* | | *0.909* |
| 0 | 1 | | 1 | |
| 1 | 1.06 | | 0.95 | |
| 2-4 | 0.72 | | - | |
| **Man's children in the hh** | | *0.002* | | *0.100* |
| 0 | 1 | | 1 | |
| 1 | **4.14** | | 0.44 | |
| 2-5 | 0.68 | | - | |
| **Children not in the hh** | | *0.216* | | *0.272* |
| 0 | 1 | | 1 | |
| 1 | 0.83 | | 1.09 | |
| 2-6 | 0.65 | | 0.50 | |
| **Woman's age at the start of the second union** | | *0.000* | | *0.041* |
| 15-24 | 1 | | 1 | |
| 25-29 | 0.84 | | 1.09 | |
| 30-34 | **0.51** | | 0.38 | |
| 35-39 | **0.17** | | **0.28** | |
| **Man's age at the start of the second union** | | *0.138* | | *0.397* |
| 14-24 | 1 | | 1 | |
| 25-29 | 0.90 | | 1.52 | |
| 30-34 | 1.23 | | 1.46 | |
| 35-39 | 0.83 | | 2.28 | |
| 40-61 | 0.47 | | 0.80 | |
| **Marital status** | | *0.000* | | *0.014* |
| Pre-cohabitation | 1.60 | | 1.01 | |
| Cohabiting | 1 | | 1 | |
| Married | **2.04** | | **2.72** | |
| **Formerly married** | | *0.435* | | *0.074* |
| No | 1 | | 1 | |
| Yes | 1.14 | | 1.71 | |
| **Dissolution type of the first union** | | *0.289* | | *0.160* |
| Divorced | 1 | | 1 | |
| Widowed | 0.58 | | 0.28 | |
| **Calendar period** | | *0.725* | | *0.345* |
| 1963 – 1973 | 0.88 | | 0.41 | |
| 1974 – 1979 | 1 | | 1 | |
| 1980 – 1987 | 1.13 | | 0.91 | |
| 1988 – 1989 | 1.40 | | 1.19 | |
| 1990 – 1992 | 1.20 | | 1.61 | |
| 1993 – 1996 | 1.27 | | 1.33 | |
| **Duration in months since the start of the second union** | | *0.000* | | *0.000* |
| $1^{st} - 5^{th}$ | **0.33** | | 0.68 | |
| $6^{th} - 9^{th}$ | 0.73 | | 0.54 | |
| $10^{th} - 15^{th}$ | 1 | | 1 | |
| $16^{th} - 21^{st}$ | 0.83 | | 0.93 | |
| $22^{nd} - 33^{rd}$ | **0.59** | | **0.36** | |
| $34^{th} - 45^{th}$ | 0.71 | | **0.35** | |
| $46^{th} - 69^{th}$ | **0.48** | | **0.31** | |
| $70^{th}$ and later | **0.13** | | **0.04** | |
| Intercept | 0.0041 | | 0.0013 | |

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[*] "in the hh" stands for "in the household at the time of the formation of the second union"

**Table 5:**

Relative risk of the conception of a first child in a second union,

female data set, age of youngest pre-union child included, and standardized for our other covariates

| | | | | | *p-value* |
|---|---|---|---|---|---|
| **Age of the youngest child at the start of the second union** | | | | | *0.035* |
| No child | 1 | | | | |
| | **0-3 years** | **3-5 years** | **5-7 years** | **Over 7 years** | |
| 1 child | 1.10 | 1.34 | 1.08 | 0.91 | |
| 2-10 children | 0.89 | 0.72 | **0.26** | 1.64 | |

Remark: We have standardized for man's pre-union children, woman's age at the start of the second union, man's age at the start of the second union, marital status, calendar period, and duration since the start of the second union.

**Figure 1:**

Baseline intensity of the conception of a first child in a second union by the woman's and the man's pre-union children living in the household at union formation, both sexes combined
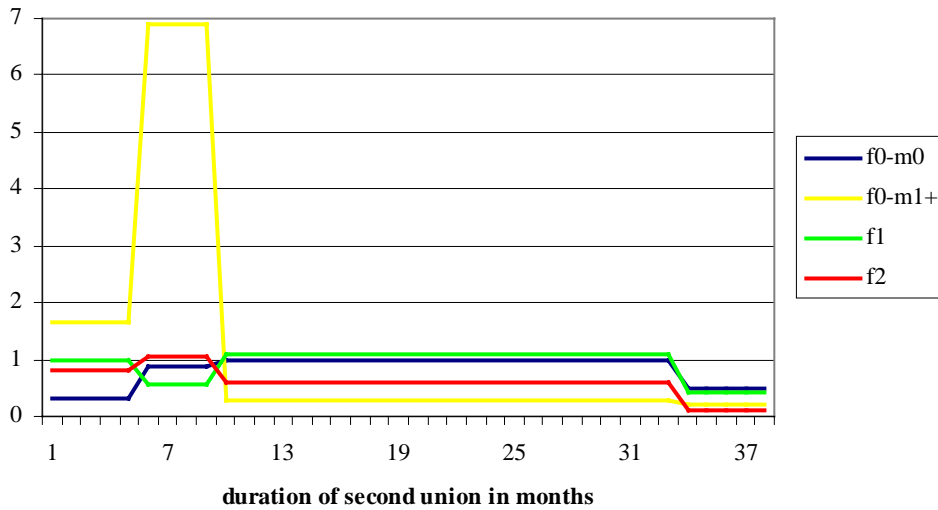


Remark:  f0_m0...   no partner brings any child into the newly formed household

  f0_m1+...  no pre-union child of the woman but at least one pre-union child of the man lived in the household
    at the time of the formation of the second union

  f1 ...    one pre-union child of the woman lived in the household at the time of the formation
    of the second union, and any number of pre-union children for the man

  f2 ...    two and more pre-union children of the woman lived in the household at the time of the formation
    of the second union, and any number of  pre-union children for the man
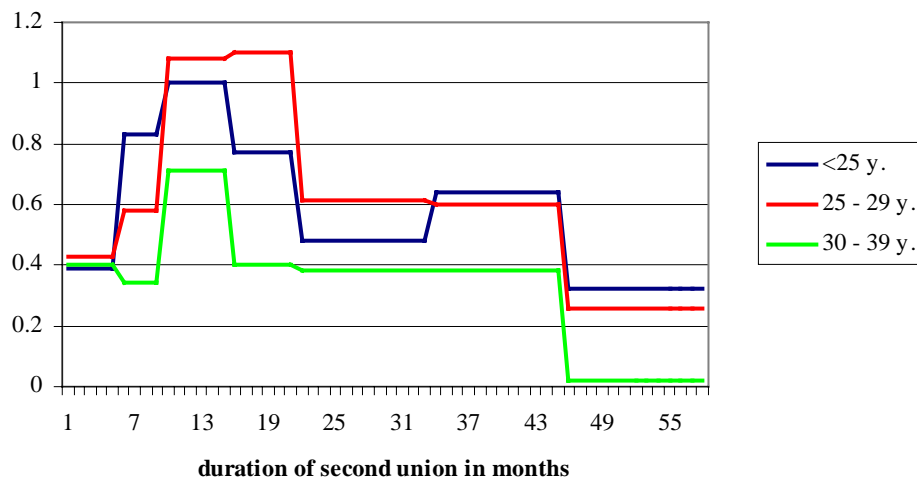
**Figure 2:**

Baseline intensity of the conception of a first child in a second union by the woman's pre-union children and age of youngest child at the time of the formation of the second union, female respondent
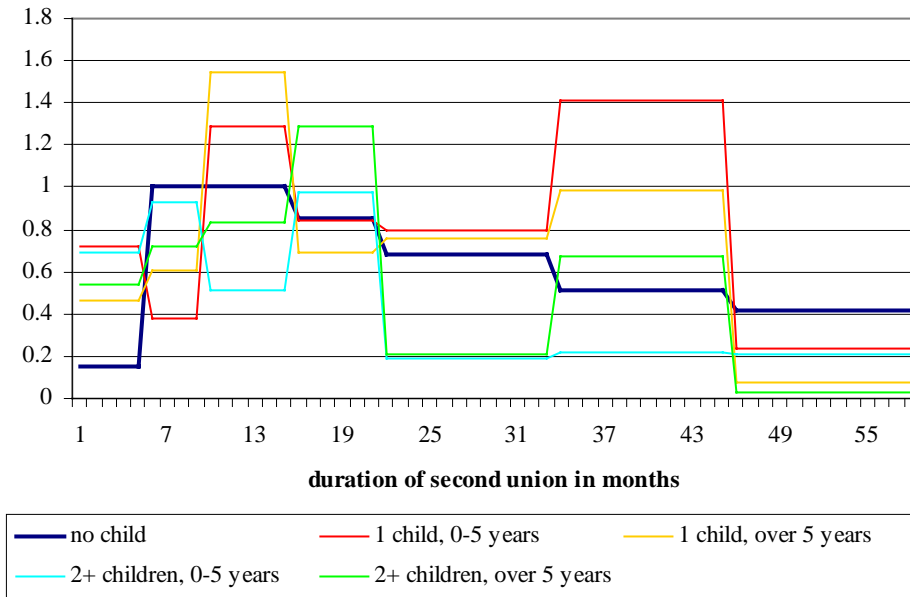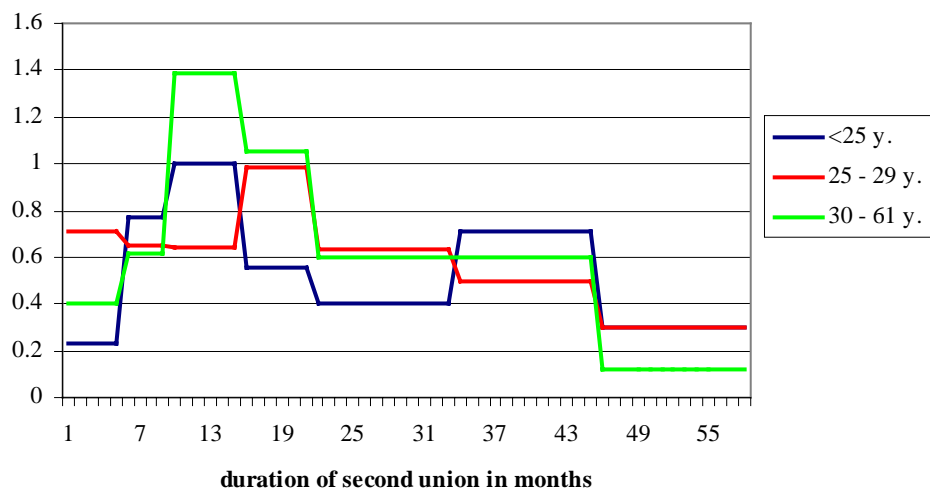
**Figure 3:**

Baseline intensity of the conception of a first child in a second union by the woman's age at the start of the second union, both sexes combined

**Figure 4:**

Baseline intensity of the conception of a first child in a second union by the man's age at the start of the second union, both sexes combined



duration of second union in months

**Figure 5:**

Baseline intensity of the conception of a first child in a second union by the current marital status of the second union, both sexes combined